

IN THE SPECIFICATION (as originally filed):

On page 1, after line 2 please insert the following:

BACKGROUND OF THE DISCLOSURE

This is the U.S. national phase of International Application No. PCT/DE03/02647 filed August 6, 2003, the entire disclosure of which is incorporated herein by reference.

The heading on page 1, line 3 has been changed as follows:

~~Description:~~ Field of the Disclosure

The paragraph beginning on page 1, line 4 has been changed as follows:

The ~~invention~~ disclosure relates to a method ~~and a system~~ for transmitting notifications to users of a logistic system in which the logistic system comprises one or more parcel compartment systems with one or more registered users, and in which the notification orders are transmitted to a central sending component which, on the basis of the orders, generates appropriate notifications and sends them to the users whereby, in order to generate the notifications, the sending component accesses one or more databases.

The disclosure also relates to a system for transmitting notifications to users of a logistic system that operates one or more parcel compartment systems.

On page 1, after line 5 please insert a heading as follows:

Related Technology

The paragraph beginning on page 2, line 12 has been changed as follows:

~~The applicant makes use especially~~ Use may be made of logistic systems for distributing letters and goods (parcels, packages), transportation boxes, pallets and containers.

The appertaining logistic systems preferably serve to distribute shipments between a sender and a recipient, whereby, for example, criteria such as transportation speed, utilization of warehouses and vehicles and the transmission of shipment data are of importance.

On page 2, after line 22 please insert paragraphs as follows:

Furthermore, U.S. Pat. No. 6,047,264 discloses a method for transmitting the status of a shipment of a user in which an entry in a central database is generated when a user orders a shipment. If the status of the shipment changes, for example, when it is transferred to a delivery company, when it is transported to various stations or when it arrives at the destination, then the status change is collected in the database. This collection can be carried out manually or electronically. Via a query module, a notification component continually requests status changes from the database and generates messages to the user of a shipment for which the status has changed. The notification is preferably made by e-mail.

International patent publication WO 02/50705 A1 describes a distribution system for electronic documents such as e-mails. These e-mails contain, for example, attachments for advertising purposes. The system aims to prevent the drawbacks of existing e-mail systems such as, for instance, the fact that a sender cannot receive information as to whether a recipient has opened the attachment to an e-mail, or whether the sender does not have software that would be needed to open a file. Moreover, it sends statistical information to the sender when a recipient has opened an electronic document. The system includes a generating module that generates a master document from a template and from selectable information of a sender. The master document is checked and transferred to a sending module that sends the document to one or more recipients.

U.S. Pat. No. 6,220,509 B1 discloses a parcel trace system in which status information about a shipment is recorded directly in the client database. In this case, the client database is preferably accessed via an Internet web page.

European patent publication EP 0 491 367 A2 discloses a method for processing messages in which orders are stored in a queue in order to be executed in a controlled manner. Here, the orders can be adapted to different conditions and features of the destinations and to communication connections. The method is especially well-suited for use in e-mail systems.

The paragraphs beginning on page 2, line 23 have been changed as follows:

~~The objective of the invention is to provide~~ disclosure provides a method and a device for transmitting notifications to users of a logistic system which allows the most flexible response possible to different events within the system and the generation of user-specific notifications. In this context, the logistic system should encompass the operation of at least one electronic parcel compartment system.

According to the ~~invention, this objective is achieved in that~~ disclosure, in response to different events within the logistic system, different modules with associated functions are called up in each case, whereby the modules generate notification orders that are transmitted to a central sending component which, on the basis of the orders, generates appropriate notifications and sends them to the users.

~~The objective is also achieved by a system for carrying out the method.~~

The paragraphs beginning on page 3, line 4 have been changed as follows:

The modules with the associated functions for responding to events within the logistic system form an external interface via which different Use Cases are mapped. In an especially preferred embodiment ~~of the invention~~, the notification orders generated by the modules are only transmitted directly to the sending component in special cases, while as a rule, they are written into a communication request queue. A queue reader reads the orders from the communication request queue in a timer-controlled manner and transmits them to the central sending component. Prior to this, the status of the notification is checked. A status change can be made, for example, in that a parcel has been picked up in the meantime or the person picking it up has changed.

According to one aspect of the ~~invention~~ disclosure, the sending component generates the notifications on the basis of data from one or more databases. These databases are advantageously at least one client database, a parcel database, an automatic parcel delivery machine database, and a document database. The client database contains, for example, data about registered clients of the logistic system, whereby each client receives an ID for purposes of identification. This data can contain addresses, phone numbers, or other information. The parcel database contains information on the parcels that are transported within the system, whereby the parcels are likewise identified by means of an ID. The automatic parcel delivery machine database contains information about the parcel compartment systems that are used within the system. This likewise involves IDs.

On page 1, before line 1 please insert a heading as follows:

BRIEF DESCRIPTION OF THE DRAWINGS

The paragraph beginning on page 1, line 1 has been changed as follows:

Additional advantages, special features and practical embodiments of the ~~invention~~ ~~ensue from the subordinate claims and from the presentation below~~ disclosure may be understood from the following detailed description of preferred embodiments, making reference to the drawing figures.

The paragraph beginning on page 4, line 5 have been changed as follows:

Figure 1 _ the process sequences between an external interface, a central sending component and a communication request queue of an especially preferred embodiment;

Figure 2 _ the process sequences between a communication request queue, a central sending component and a delivery contract logic of an especially preferred embodiment;

Figure 3 _ the process sequences between a central sending component, various databases and a gateway; and

Figure 4 _ a general overview of the sequences within the system for transmitting notifications.

On page 4, after line 12 please insert a heading as follows:

DETAILED DESCRIPTION

The paragraph beginning on page 4, line 13 has been changed as follows:

Below, a logistic system is described for operating a system ~~comprising~~ including one or more parcel compartment systems with a variable number of registered users. This is an especially preferred embodiment ~~of the invention~~, but the disclosed method ~~according to the invention~~ is also suitable for other logistic systems in which notifications are sent.

The paragraphs beginning on page 9, line 10 have been changed as follows:

In order to use the disclosed method ~~according to the invention~~ in actual practice, it ~~has proven to be~~ is advantageous for the list of undeliverable notifications to be revised manually at regular intervals (e.g. every 24 hours).

The drawings in Figures 1 to 4 show an overview of the most important partial components of an especially preferred embodiment of the system ~~according to the invention~~.

The external systems are marked with cross-hatching, whereas the parts belonging to the notification system are shown in white.

The drawing in Figure 1 shows the structure of an especially preferred embodiment of a notification component. The notification component is connected to an external interface 10 that is called up externally when certain events of the logistic system have occurred. The interface is formed by several modules, each with associated functions. The events of the logistic system are converted into notification orders by a B2B account logic component (not shown here). For certain special cases, these orders can be sent directly via a central sending component 30. As a standard procedure, however, the orders are written into a communication request queue 40 and then transmitted to the central sending component 30 in a timer-controlled manner. This allows, for example, reminder notifications to be defined at later points in time (e.g. after 2 two days or 7 seven days). The writing into the queue also has the advantage that failed sending attempts are automatically repeated here.

The paragraph beginning on page 10, line 21 has been changed as follows:

Below, the individual components of the system and their functions within an especially preferred embodiment of the disclosed method ~~according to the invention will be~~ are explained in greater detail.

The paragraph beginning on page 12, line 24 has been changed as follows:

In order to simplify the management of the templates 110, they are stored in a database 100. In an especially preferred embodiment ~~of the invention~~, this database comprises several fields that are depicted in table form below:

The paragraph beginning on page 13, line 9 has been changed as follows:

~~It should be noted that,~~ as As a function of the event of the logistic system for notification, the database key 'Contract' can be a LogisticProvider or a LogisticContractor (in the case of BNK1 and BNK2) or else a DeliveryContract (in the case of BNK3 to BNK5).

The paragraph beginning on page 13, line 13 has been changed as follows:

~~It has proven to be~~ is advantageous to use various placeholders within the templates 110 which can be replaced with concrete information. With an eye towards the use of HTML-formatted e-mails, these placeholders should advantageously not be defined as HTML tags.

The paragraph beginning on page 25, line 26 has been changed as follows:

The individual types of communication are mapped via so-called ~~SPI's~~ SPIs (Service Provider Interfaces). There is such an SPI for each type of communication. Each SPI is called up with the communication request object. As a function of the data in this object, an e-mail and/or SMS is created. For this purpose, the appropriate template 110 is read in, and the placeholders are replaced by the information read from the appropriate database.